

The moths of Oxy Wood, Milton Estate, near Helpston, Northamptonshire, 2001-2003

Oxy Wood is one of a number of small woodlands on the Milton Estate, near Helpston, in Northamptonshire (VC 32, O. S. grid reference TL 124033). During the early 1990s, I investigated the moth fauna of various of these woodlands (see Waring 1992. *Butterfly Conservation News* 51: 59-62, 52: 48-56 and Waring *et al.* 1993. *Butterfly Conservation News* 54: 52-61), but Oxy Wood was not one of them. In each of the three years 2001 to 2003 I made single light-trapping visits to Oxy Wood in search of the White-spotted Pinion moth *Cosmia diffinis* and the Square-spotted Clay *Xestia rhomboidea* as part of the Action for Threatened Moths Project coordinated by Butterfly Conservation and part-funded by English Nature. Successful larval searches for the Square-spotted Clay were also mounted, as part of a joint project between Butterfly Conservation Cambridgeshire & Essex Branch and Writtle College. The results of the larval searches were reported by Waring (2003. *British Wildlife* 14: 362).

Oxy Wood contains a large amount of Wych Elm *Ulmus glabra*, mainly as tall re-growth, more so than any other of the Milton Estate woodlands. Wych Elm is a recorded larval foodplant of the White-spotted Pinion, an elm specialist which is a UK Biodiversity Action Plan priority species (1999. UK Biodiversity Group Tranche 2 Action Plans. Vol. IV- invertebrates. English Nature.). The moth is currently being found only in Cambridgeshire, Huntingdonshire, Essex and Bedfordshire (Waring, Townsend & Lewington, 2003. *Field guide to the moths of Great Britain and Ireland*. British Wildlife Publishing). The first light-trapping visit was made on 26 August 2001, when three Robinson traps were operated from dusk (20.15 hrs) until 23.15 hrs by which time few additional moths were arriving. The date was on the late side for the White-spotted Pinion and none were seen amongst the 21 species recorded. The most noteworthy moths were the Maple Prominent *Ptilodon cucullina* (which occurs regularly in the nearby village of Werrington), the Black Arches *Lymantria monacha* and the Pinion-streaked Snout *Schrankia costaestrigalis*. The visit in 2002 was made on 12 August, a much more promising date, by which time the White-spotted Pinion is usually at peak numbers in its nearby sites in Huntingdonshire and Cambridgeshire. On this occasion a single standard Heath-pattern actinic trap was operated from dusk until dawn on a photocell switch in a central glade surrounded by Wych Elm. Again, no White-spotted Pinion nor other elm-dependent moths were seen, but a single Square-spotted Clay *Xestia rhomboidea* in good condition was present amongst the 38 macro-moths of 14 species trapped. This is the first record of the species for Oxy Wood, which does not appear to have been light-trapped previously. Follow-up searches for the larvae in the spring of 2003 confirmed that the moth breeds here, as also at nearby Hilly Wood in 2002 and 2003. The Black Arches was found again and a Flame Carpet *Xanthorhoe designata* is worthy of mention. On 5 August 2003 another recording session was made with the same actinic trap, from dusk to dawn in exactly the same place as in 2002. Both the White-spotted Pinion and the Square-spotted Clay were recorded in numbers by the author and colleagues in the Huntingdonshire and Cambridgeshire sites the same week (e.g., at Overhall Grove,

(e.g., at Overhall Grove, Cambs. on 7 August, Waring, 2003. *British Wildlife* **15**: 61). The White-spotted Pinion was in peak numbers, but the Square-spotted Clay had not yet reached its peak. Neither species was seen in Oxy Wood on this occasion although we knew the Square-spotted Clay to be resident. This result is a reminder of the hit and miss nature of light-trapping populations of moth at low density, especially with actinic traps. However, the catch of other moths was a large one: 81 macro-moths of 27 species, due to extremely warm days and nights at this time. Among the moths was a Lesser-spotted Pinion *Cosmia affinis*, an elm-dependent close relative of the White-spotted Pinion which is proving to be more widespread. This is the first ever record of the species from Oxy Wood, nor did we encounter it in the other Milton Estate woods inspected in the early 1990s. However, elm and its dependent species were not targeted at that time and populations of the Lesser-spotted Pinion could easily have missed detection. Other noteworthy species recorded at Oxy Wood on the night of 5 August 2003 were singletons of the Black Arches again, Maiden's Blush *Cyclophora punctaria*, Small Waved Umber *Horisme vitalba* and two rather worn Large Twin-spot Carpet *Xanthorhoe quadrifasiata*.

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European Corn Borer *Ostrinia nubilalis* (Hb.) (Lep.: Pyralidae) on hops in Kent

Stem-boring caterpillars were found infesting a one-hectare experimental planting of dwarf hops *Humulus lupulus* at East Malling (O.S. grid reference TQ 7057) in July 2003. A survey of 2800 plants on 15 August 2003 showed that 80% were infested and that tunnels occurred at all heights up to the trellis support wire at 2.5m. By August, many of the plants were suffering die-back of the cone-bearing lateral shoots. The continued presence of caterpillars in the tunnels during September, and their habit of tunnelling upwards rather than downwards suggested that the species responsible was not Rosy Rustic moth *Hydraecia micacea* (Esper), a minor pest of hops in UK first taken in the 1920s (Theobald, F.V., 1928. Notes on hop insects in 1927. *Entomologist*, **16**: 121-122). This was confirmed when six male and one female *O. nubilalis* emerged from stem samples collected on 6 November 2003 and stored for six weeks in a domestic refrigerator to satisfy any diapause requirements before being returned to room temperature. The adult moths emerged in March-April 2004.

Ostrinia nubilalis has been recorded from hops wherever they occur in continental Europe. Its incidence on hop has increased recently coincident with the introduction of imidacloprid, a target specific aphicide which replaced broad-spectrum organophosphorus products (eg Jastrzebski, A., 1999. The occurrence of European corn borer on hops. *Progress in Plant Protection* **39**: 436-438). Insecticides were last used on the dwarf hop planting at East Malling in 2001. No infested plants were found prior to 2003, nor at two sites in the west midlands (SO5840 and SO7359) and one in